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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO.       |
|---|-------------|----------------------|------------------------------|------------------------|
| 10/697,312  | 10/31/2003  | Eric Bernier         | 71493-1181 /slb              | 9866                   |
| 7380 7590 08/15/2007<br>SMART & BIGGAR<br>P.O. BOX 2999, STATION D<br>900-55 METCALFE STREET<br>OTTAWA, ON K1P5Y6<br>CANADA |             |                      | EXAMINER<br>PASCAL, LESLIE C |                        |
|   |             |                      | ART UNIT<br>2613             | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>08/15/2007      | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/697,312

Applicant(s)

BERNIER ET AL.

Examiner

Leslie Pascal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 7-13, 19-24, 30 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 14-18 and 25-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10-13-03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spare switching fabric of claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6, 14-18, 25-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims appear to be misdescriptive with regard to the "redirecting". The claims say redirecting around the optical component, yet the figures show that the portion does not redirect around, but goes through the switch (which appears to be the component, especially in view of claim 2).

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-6, 14-18 and 25-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims say that the protection portion is redirected around the component, yet the drawing and the specification only teach that the protection signals is input to the switching fabric. In portions of the specification it MENTIONS that a spare switch fabric can be used. This is unclear, since only the one signal is input to the spare switch fabric, what is done to the one signal since it does not appear that the one signal would actually be switched. Further, it is unclear how the connections to box 20 are connected to the spare switch fabric. For example, it would appear that the

signal from port 54 passes to port 58. If there were a spare switch fabric, wouldn't the signal just go straight through since there would be no switching done?

Paragraph 30 is the only paragraph that mentions spare switch fabric. It says that either a spare switch fabric can be used or that an integrated switch fabric can be used. If it is integrated, how is the signal redirected around it-since it appears that it has to go through the integrated switching fabric as shown. If there is a spare switch fabric, it is unclear how the signal is switched since it is a single signal that does not appear to be switched (it has to go from line 13 to line 28 in order to work).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 -6, 14-18, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi et al (7146102)

If the component is read on one of the fibers, which is output from the demultiplexer 63, the claims read on Nishi. See figure 15 or Nishi. In regard to claims 1 and 14, Nishi et al teach optically splitting a WDM signal (61) to provide protection (redundancy), detecting a failure (column 14, lines 37-42) and in that he avoids the failure it is obvious that he redirects using the redundancy, and wavelength filtering (64 and/or 74). In regard to claim 2, he teaches switching means (13). In several of the figures, he teaches protection switching means (spare switching means). In regard to claim 3, it would have been obvious to have one of the signals of the WDM system as an "in-

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service” signal since most signals are considered to be “in service”. In regard to claim 4, he combines the signals at element 76. In regard to claim 5, he teaches that the filter is variable. It is well known to tap a portion of a signal that is input to a variable filter in order to properly tune it to the wavelength that it is to tune to. In regard to claim 6, see elements 63 and 72. In regard to claim 15, the input fiber is an ingress optical waveguide. In regard to claims 25-27, it would appear that no invalid optical signals are transmitted to the system from the protection pathway, because they would be filtered out. In regard to claims 28-29, although he does not specifically teach that his system is used for a line card, this is only in the preamble, which is not given patentable weight. If it were to be given patentable weight, it would appear that since Nishi and the applicant have the same means at the input of a switching means, it would have been obvious to use the device as a line card. The art rejection with regard to bypassing the switching fabric is made in view of the above 112 problems. Nishi teaches the same type of system. It would appear that if the applicants’ switch fabric is redirected around, so is Nishi’s.

8. The prior art made of record and not relied upon is considered pertinent to applicant’s disclosure. Cavanaugh (7221429) teaches using a tap with power to provide a feedback signal to control the filter.

9. In regard to the applicants’ previous arguments with regard to Nishi et al, the applicant argues that Nishi only sends a wavelength NOT THE WDM signal. As written, when read broadly, the claims read on Nishi et al. The claims say that a failure is detected that would affect a particular optical signal and redirects around *the*

*component*. If the component were a fiber that is output by the WDM, this would read on the claims. Further, the claims say that filtering is provided to obtain THE PROTECTION PORTION of the particular optical signal. Nishi teaches wavelength filtering in order "to provide the protection portion of the particular optical signal".

Further, see paragraph 126 of the applicants' specification, the applicant says that it is not critical whether the filter is at the input or the output of the switch means. Further, with regard to claim 14, the claims say the tunable filter is coupled to the "redirecting means". If the fiber, which is output from 61, is considered to be the redirecting means, the filter is coupled to the filter and the fiber redirects around a component (fibers output by 63). In regard to claims 25-26, if only the signal that is to be protected passes through, than no INVALID signals pass there through. If the applicant tries to argue that this is the blocker, the blocker is not claimed since the blocker is not in the protection path.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Leslie Pascal  
Primary Examiner  
Art Unit 2613